

**CLASS: XII REVISION TEST- BIOLOGY MARKS : 50**

**DATE: 23.12.19 Time: 40min**

**I. Choose the best answer for the following: (1X5=5)**

# 1. Which one of the following products of apiculture is used in cosmetics and polishes

# a. Honey              b. Oil                c. Wax                d. Royal jelly

# 2. A collection of all the alleles of all the genes of a crop plant is called

# a. germplasm collection              b. protoplasm collection

# c. herbarium                               d. somaclonal collection

# 3. Sonalika and KalyanSona are varieties of

# (a) wheat        (b) rice            (c) millet            (d) tobacco

# 4.  A group of animals which are related by descent and share many similarities are referred to as

# (a) breed              (b) race            (c) variety              (d) species

# 5. Inbreeding is carried out in animal husbandry because it

# (a) increases vigour                (b) improves the breec;

# (c) increases heterozygosity                       (d) increases homozygosity

# II. Answer the following questions: (5x2=10)

# 6. In an agricultural field there is a prevalence of the following organisms and crop disease which are affecting the crop yield badly.

# a.white rust b. leaf and stripe rust

# c. black rot d. Jussids

# 7. Explain the importance of “selection” during inbreeding in cattle.

# 8. Growing spirulina on a large scale is beneficial both environmentally and nutritionally for humans”. Justify.

# 9. Enlist four important components of poultry farm management.

# 10. Mention the role of ‘genetic mother’ in MOET.

# III. Give brief answer: (5X3=15)

# 11. Explain the relevance of “totipoteny” and “somaclones” in raising healthy banana plants from virus infected banana plants.

# 12. What is somatic hybridization? Explain the various steps involved in the process.

# 13. How is a disease – resistant plant selected for successful breeding?

# 14. Explain the significance of the auxin / cytokinin ratio in plant tissue culture.

# 15. The term 'desirable trait' can mean different things for different plants. Justify the statement with suitable examples.

**III. Give detailed answer: (4x5=20)**

# 16. Enlist the steps involved in breeding of cattle. Suggest two disadvantages of this practice.

# 17.  (a) Mutations are beneficial for plant breeding. Taking an example, justify the statement.

# (b) Discuss briefly the technology that made us self-sufficient in food production.

# 18.  'Modern methods of breeding animals and plants can alleviate the global food shortage'. Comment on the statement and give suitable examples.

# 19. What are three options to increase food production? Discuss each giving the salient features, merits and demerits.